

## ABSTRACT OF THE DISCLOSURE

The invention provides a temperature compensated crystal oscillator that can obtain a large variable range and that can 5 obtain high temperature stability. This temperature compensation system employs a configuration comprising a oscillation circuit 12 including a crystal vibrator 11 having a piezoelectric element excited in a given frequency and an oscillation amplifier that excites the piezoelectric element 10 by flowing a current to the piezoelectric element, a vibrator current control circuit 13 that controls the current of the crystal vibrator, a temperature compensation voltage generation circuit 15 that compensates for temperature characteristics of the crystal vibrator 11, and an external variable capacitance 15 diode 17 that changes the oscillation frequency of the oscillation circuit 12 using an external variable voltage controller 16. The vibrator current control circuit 13 comprises a variable capacitance diode 14 that controls the vibrator current, and capacitors 1 to 3.